

Northeast Counties (Apache, Navajo, Gila) TERM Report by CIP Program

Training & Education Resource Model

Based on 2006-2008 occupational projections, Education & Training levels 1-11 (no restrictions)

Score = average of the five percentiles, using weights 3, 3, 1, 1, 1

Rank	CIP Code	CIP Title	Percentiles						Labor Market Data					BLS Ed & Train Code
			Score	Open-ings	Wage	ONET	Growth Rate	Turn-over Ratio	Open-ings	Hourly Wage	ONET Score	Growth Rate	Turn-over Ratio	
1	51.16	Nursing	86.3	89	87	76	87	84	112	23.90	651	3.8	2.3	6.2
2	52.02	Business Administration, Management and Operations	76.3	68	95	84	53	61	59	26.51	654	2.5	1.4	6.7
3	46.02	Carpenters	71.1	79	47	87	84	89	69	16.21	658	3.8	2.5	9.0
4	51.09	Allied Health Diagnostic, Intervention, and Treatment Professions	68.4	47	76	66	92	87	27	21.10	630	4.1	2.4	6.6
5	51.06	Dental Support Services and Allied Professions	64.8	22	92	50	95	95	13	26.29	594	4.9	3.1	8.8
6	13.12	Teacher Education and Professional Development, Specific Levels and Methods	62.6	87	58	55	32	42	106	17.36	613	2.1	1.2	5.2
7	51.07	Health and Medical Administrative Services	61.7	74	53	21	79	76	62	16.47	537	3.2	1.9	8.2
8	49.02	Ground Transportation	60.8	92	26	47	66	79	115	14.39	581	2.8	1.9	10.4
8	52.01	Business/Commerce, General	60.8	16	100	61	68	71	13	33.08	618	2.8	1.7	5.0
10	46.04	Building/Construction Finishing, Management, and Inspection	60.2	84	39	32	71	68	79	15.66	555	2.9	1.6	9.9
11	51.15	Mental and Social Health Services and Allied Professions	58.8	50	74	39	45	74	32	19.15	569	2.4	1.8	5.9
12	44.04	Public Administration	53.8	18	97	71	16	50	13	30.62	642	1.8	1.2	4.5
13	13.04	Educational Administration and Supervision	52.5	22	89	89	24	24	13	26.26	668	1.9	0.8	4.0
14	48.05	Precision Metal Working	52.0	29	68	24	89	63	16	18.33	542	4.0	1.4	9.0
15	46.99	Construction Trades, Other	50.6	71	16	37	76	82	61	12.67	567	3.1	2.2	9.8
16	51.26	Health Aides/Attendants/Orderlies	50.3	63	11	34	97	100	45	10.36	567	5.0	4.1	9.1
17	46.05	Plumbing and Related Water Supply Services	50.0	0	82	97	55	53	11	21.39	698	2.6	1.3	8.7
18	13.13	Teacher Education and Professional Development, Specific Subject Areas	49.7	55	55	79	21	16	36	17.20	652	1.8	0.7	4.8
18	43.01	Criminal Justice and Corrections	49.7	76	45	82	0	3	63	16.01	653	1.1	0.5	9.6
18	43.02	Fire Protection	49.7	58	42	100	39	8	39	15.86	760	2.2	0.6	8.1

Rank	CIP Code	CIP Title	Percentiles						Labor Market Data					BLS Ed & Train Code
			Score	Openings	Wage	ONET	Growth Rate	Turn-over Ratio	Openings	Hourly Wage	ONET Score	Growth Rate	Turn-over Ratio	
21	47.01	Electrical/Electronics Maintenance and Repair Technology	49.4	3	84	95	42	47	11	22.10	680	2.3	1.2	9.0
22	46.01	Mason/Masonry	48.5	8	61	58	82	92	12	17.49	616	3.6	2.7	8.7
23	01.01	Agricultural Business and Management	46.2	13	79	63	37	39	13	21.11	626	2.1	1.2	7.8
24	47.03	Heavy/Industrial Equipment Maintenance Technologies	45.8	33	71	92	3	5	17	18.36	672	1.1	0.5	9.5
25	51.08	Allied Health and Medical Assisting Services	44.4	37	21	29	100	97	20	13.31	550	5.7	3.8	9.4
26	12.05	Culinary Arts and Related Services	43.9	100	3	3	74	11	549	8.27	487	2.9	0.6	10.7
27	52.04	Business Operations Support and Assistant Services	42.1	95	18	5	5	29	158	13.13	490	1.4	0.9	10.6
28	01.06	Applied Horticulture/Horticultural Business Services	41.8	82	13	13	58	21	75	11.32	501	2.6	0.8	10.7
28	13.10	Special Education and Teaching	41.8	11	66	53	50	45	13	18.18	600	2.4	1.2	5.2
30	52.99	Business, Management, Marketing, and Related Support Services, Other	40.9	5	63	45	63	55	11	18.04	579	2.7	1.3	8.6
31	47.06	Vehicle Maintenance and Repair Technologies	40.2	33	50	68	26	18	17	16.33	639	2.0	0.8	7.2
32	52.18	General Sales, Merchandising and Related Marketing Operations (NEW)	40.1	97	8	16	29	0	353	9.36	506	2.0	0.5	10.9
33	46.03	Electrical and Power Transmission Installers	39.5	45	34	74	18	26	25	15.58	645	1.8	0.8	9.7
34	52.19	Specialized Sales, Merchandising, and Marketing Operations (NEW)	37.4	26	37	42	47	58	16	15.61	576	2.4	1.4	8.7
35	52.03	Accounting and Related Services	36.8	66	32	0	8	32	56	15.20	485	1.6	0.9	9.0
36	52.08	Finance and Financial Management Services	32.7	42	29	11	34	37	22	14.90	500	2.1	1.0	9.9
37	19.05	Foods, Nutrition, and Related Services	30.4	53	24	18	13	13	34	13.72	534	1.8	0.7	8.7
38	19.07	Human Development, Family Studies, and Related Services	30.1	39	0	26	61	66	21	7.88	549	2.6	1.5	10.0
39	13.15	Teaching Assistants/Aides	27.8	61	5	8	11	34	41	8.80	495	1.7	1.0	11.0

Explanations for Each Column of the TERM Report		
Column		Explanation
A	Rank	This is the rank of the CIP (Classification of Instructional Program) by percentile score as shown in column D. Tie scores get tie ranks. Sometimes scores appear to be a tie, but if carried out to more decimal places, are not. Such CIPs are not assigned tie ranks.
B	CIP Code	CIP (Classification of Instructional Programs) code as assigned by the U.S. Department of Education. See Sources note below for more details.
C	CIP Title	The title of the training program, as assigned by the U.S. Department of Education Classification of Instructional Programs.
D	Score	The score is a weighted average of columns E through I. The weights used are 3, 3, 1, 1, 1, respectively. See Calculation Method note below for more details.
E-I	Percentiles	These 5 columns are the percentile scores of the data in columns J through N. Percentiles scores are used to compute different types of data in the model. For example, wages in dollars and growth in percentages. Tie scores produce tie percentiles.
J	Openings	The projected number of openings expected per year for the occupations within this CIP. If an occupation is contained in more than one CIP, its openings are distributed evenly among those CIPs. Projected openings based on revised 2006-2008 occupation projections.
K	Hourly Wage	The average of the wages of the occupations contained in this CIP, weighted by the number of openings in each occupation. Wages based on 2006 Occupational Employment Statistics (OES) survey.
L	O*NET Score	O*NET is an acronym for the Occupational Information Network (http://www.onetcenter.org/). This data is a measure of the skills, knowledge, and abilities required for the occupations within this CIP, weighted by the number of openings in each occupation. The numerical score for each comparative occupational descriptor in the O*NET Knowledge, Skills, and Abilities data files were summed for each occupation. See Sources note below for more information.
M	Growth Rate	The two-year projected rate of growth in employment of the occupations in this CIP, weighted by the number of openings in each occupation. This number could be negative but usually is not. Occupational growth rate is from the revised 2006-2008 Occupational Projections produced by the AzDES Research Administration.
N	Turnover Ratio	This is the projected number of annual openings due to growth divided by the projected number of annual openings due to replacement (like retirements, quits, promotions, etc.). Higher ratios indicate lower turnover. Based on the revised 2006-2008 occupational projections data.
O	BLS Education & Training Code	The job training and educational levels as assigned by the Bureau of Labor Statistics (BLS). See detailed descriptions of the BLS codes on page two of these notes. Note that higher numbers indicate lower amounts of education or training time.

Sources	
1	Openings and wage data are produced by the Arizona Department of Commerce, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics. Wages are from the 2006 OES survey, and openings are from the 2006-2008 occupational employment projections.
2	For the O*NET score, the O*NET database, www.onetcenter.org/database.html , version 11.0, was used.
3	CIP / SOC crosswalk source: National Crosswalk Service Center http://www.xwalkcenter.org/xwxwalk.html#SOCCIP
4	The education levels are from the Bureau of Labor Statistics website at ftp://ftp.bls.gov/pub/special.requests/ep/optddata/
Calculation method	
1	Hourly wages were calculated by dividing annual wages by 2080.
2	O*NET scores were calculated by occupation using the SOC (Standard Occupational Code). The scores for each 6-digit SOC were calculated by averaging the scores for the 8-digit O*NET occupations that comprise each 6-digit SOC.
3	In this iteration of the TERM, there were no restrictions on the BLS Training and Educational code. Note that the lower the training and educational time requirement, the higher the code numbers (see below).
4	Statistics by CIP (Classification of Instructional Programs) (except openings) were calculated by taking an openings-weighted average of the occupations in the CIP. For occupations appearing in more than one CIP, openings were evenly distributed among the CIPs. For example, if an occupation had 30 openings and was found in 3 CIPs, that occupation would be listed as having 10 openings in each of the 3 CIPs. After the openings were distributed in this manner, the number of openings in each CIP was calculated by summing the openings for each occupation within the CIP.
5	Percentiles were calculated for each statistic shown. In case of a tie, the same percentile was assigned to all CIP's involved in the tie.
6	The following formula determined the score for each CIP: $(3 \times \text{openings percentile} + 3 \times \text{wage percentile} + \text{ONET percentile} + \text{growth percentile} + \text{ratio percentile}) / 9$
BLS Education Codes	
1	First professional degree
2	Doctoral degree
3	Master's degree
4	Bachelor's or higher degree, plus work experience
5	Bachelor's degree
6	Associate degree
7	Post-secondary vocational training
8	Work experience in related occupation
9	Long-term on-the-job training
10	Moderate-term on-the-job training
11	Short-term on-the-job training
Questions and Comments	
	Direct questions or comments to Rick Van Sickel, 602-542-6481, or John Graeflin, 602-542-6492, at Research Administration, Arizona Department of Commerce.